

# BiCMOS TECHNOLOGY ON SOI SUBSTRATES

## Abstract

A method and a BiCMOS structure are provided. The BiCMOS structure includes an SOI substrate having a bottom Si-containing layer, a buried insulating layer located atop the bottom Si-containing layer, a top Si-containing layer atop the buried insulating layer and a sub-collector which is located in an upper surface of the bottom Si-containing layer. The sub-collector is in contact with a bottom surface of the buried insulating layer. The structure also includes an extrinsic base heterojunction bipolar transistor located in an opening provided in a bipolar device area of the SOI substrate in which a base region of the bipolar transistor is located directly atop the sub-collector.